

Mineral Industry Surveys

For information, contact:

Valentin V. Tepordei, Crushed Stone Specialist

U.S. Geological Survey

983 National Center

Reston, VA 20192

Telephone: (703) 648-7728, Fax: (703) 648-7975

E-mail: vteporde@usgs.gov

Feri Naghdi (Data)

Telephone: (703) 648-7981, Fax: (703) 648-7975

Nick Muniz (Data)

Telephone: (703) 648-7980, Fax: (703) 648-7792

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.usgs.gov/minerals>

CRUSHED STONE AND SAND AND GRAVEL IN THE SECOND QUARTER OF 1999

The estimated output of *crushed stone* produced and shipped for consumption in the second quarter of 1999 was 414.0 million metric tons, an increase of 4.0% compared with the same period of 1998. The estimated output of *construction sand and gravel* produced and shipped for consumption in the second quarter of 1999 was 282.0 million metric tons, an increase of only 0.3% compared with the same period of 1998.

These estimates are based on the information reported to the U.S. Geological Survey quarterly sample survey by the *crushed stone* and *sand and gravel* producers.

The increases in production-for-consumption of both *crushed stone* and *construction sand and gravel* in the second quarter of 1999 are again mostly due to the high level of activity in public, private, and commercial construction work. It should be noted that in the second quarter of 1999 there was also an increase of 6.2% in portland cement consumption.

The estimated output of *crushed stone* produced for consumption in the first 6 months of 1999 was 683.4 million metric tons, an increase of 5.2% compared with the same period of 1998. The estimated output of *construction sand and gravel* produced for consumption in the first 6 months of 1999 was 460.3 million metric tons, an increase of 4.2% compared with the same period of 1998.

The quarterly survey is a sample survey that generates production-for-consumption estimates by quarters for each State, except Alaska and Hawaii, and each U.S. Census geographic division, based on information reported voluntarily by a limited number of producing companies. Occasionally, the number of companies reporting in an area varies from quarter to quarter, or previously reported data by some companies are revised. As a result of such changes in the size or the composition of the statistical sample, the estimated quantities for prior quarters are recalculated. The latest release of the Quarterly Mineral Industry Surveys contains the most recent estimated totals and percentage changes and supersedes previously published similar information.

The production-for-consumption estimates for *crushed stone* and *sand and gravel* are generated independently for each State and geographic division, which are treated as separate statistical sample areas. Therefore, some differences may exist between

the total for a division and the sum of State totals that are part of the same geographic division.

The leading geographic divisions in the production-for-consumption of *crushed stone* in the second quarter of 1999 were the South Atlantic with 98.4 million metric tons, or 23.8% of the U.S. total, followed by the East North Central with 80.9 million metric tons, or 19.5%, and the East South Central divisions with 48.3 million metric tons, or 11.7%.

For *construction sand and gravel*, the leading geographic divisions were the East North Central division with 59.1 million metric tons, or 21.0% of the U.S. total, followed by the Mountain with 51.4 million metric tons, or 18.2%, and the Pacific division with 51.0 million metric tons, or 18.1%. The estimated totals by quarters for the geographic divisions do not include Alaska and Hawaii.

The six leading States in the production-for-consumption of *crushed stone* in the second quarter of 1999 were Texas, Pennsylvania, Ohio, Florida, Virginia, and Illinois. Their combined total production represented 34.0% of the U.S. total.

The five leading States in the production-for-consumption of *construction sand and gravel* in the second quarter of 1999 were California, Michigan, Texas, Arizona, and Ohio. Their combined total production represented 33.9% of the U.S. total.

A total of 358 *crushed stone* and *construction sand and gravel* companies and subsidiaries reported production-for-consumption information to the second quarter sample survey. The participation of most of the major producing companies in this survey is reflected by the high percentage coverage obtained for most geographic divisions and States. The percentage coverage indicates how much of the total estimated production-for-consumption for a State or a geographic division was actually reported by companies participating in this survey and was used to generate the estimated totals for that particular area. The percent changes between the estimated production-for-consumption for the current quarter and the same quarter of the prior year included in this report are important indicators of the production-for-consumption trends occurring in a particular area of the country.

TABLE 1
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/
(Thousand metric tons and thousand dollars)

Region/Division	1998					1999					
	Quantity				Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Quantity 2nd qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	2nd qtr.	3rd qtr.	4th qtr.	Total 2/							
Northeast:											
New England	10,400	12,100	10,200	35,600	257,000	3,100	5.0	10,700	3.1	45	17
Middle Atlantic	43,500	53,900	42,800	162,000	1,060,000	19,900	-7.5	45,200	4.0	59	34
Midwest:											
East North Central	77,000	88,800	77,500	280,000	1,420,000	34,800	-4.1	80,900	5.1	68	44
West North Central	46,200	49,700	42,100	166,000	911,000	27,700	-0.3	45,500	-1.5	53	40
South:											
South Atlantic	92,200	100,700	92,600	353,000	2,290,000	76,800	14.3	98,400	6.7	84	52
East South Central	45,700	51,800	45,500	176,000	1,000,000	32,900	0.3	48,300	5.8	69	19
West South Central	44,200	45,900	40,300	166,000	839,000	43,400	22.8	45,200	2.4	65	28
West:											
Mountain	15,300	15,500	12,200	53,100	312,000	11,800	16.9	14,300	-6.7	45	21
Pacific 5/	23,200	26,200	24,000	91,300	580,000	19,500	9.0	25,000	7.9	45	26
Total 2/	398,000	445,000	387,000	6/1,500,000	6/8,800,000	270,000	7.2	414,000	4.0	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska, Hawaii, and "Other" totals; see Table 2, footnote 7.

TABLE 2
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/
(Thousand metric tons and thousand dollars)

State	1998					1999					
	Quantity				Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Quantity 2nd qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	2nd qtr.	3rd qtr.	4th qtr.	Total 2/							
Alabama	11,800	12,700	11,200	45,600	308,000	11,200	13.5	13,200	11.2	75	13
Alaska 5/	--	--	--	3,200	22,400	--	--	--	--	--	--
Arizona 6/	--	--	--	7,400	43,300	--	--	--	--	--	--
Arkansas	11,000	10,900	8,700	38,600	241,000	7,800	-3.3	9,900	-10.0	50	10
California	14,200	16,300	15,600	57,200	395,000	11,100	-1.0	14,900	5.6	52	14
Colorado	3,700	3,400	2,400	12,000	78,900	2,600	6.0	3,600	-1.2	68	6
Connecticut	2,600	2,300	2,100	7,300	73,000	400	33.2	2,700	1.1	31	4
Delaware 5/	--	--	--	--	--	--	--	--	--	--	--
Florida 7/	20,700	20,400	20,800	81,700	449,000	21,200	6.7	21,700	5.0	65	10
Georgia 7/	18,300	20,400	18,600	71,000	476,000	17,100	25.2	19,900	8.3	102	8
Hawaii 5/	--	--	--	5,000	50,000	--	--	--	--	--	--
Idaho 7/	500	900	1,300	3,000	13,500	500	56.1	600	11.0	51	3
Illinois	17,700	22,300	20,100	68,300	376,000	9,600	17.7	20,400	15.3	72	12
Indiana 7/	15,700	19,100	16,500	60,800	289,000	8,500	-10.5	16,900	7.8	75	13
Iowa	11,500	12,300	11,100	40,400	234,000	5,000	-10.0	11,900	3.4	53	7
Kansas	6,800	6,100	5,100	22,600	102,000	4,900	6.1	5,800	-14.4	64	10
Kentucky	15,400	18,300	16,600	61,300	282,000	11,900	7.5	17,700	14.7	56	7
Louisiana 6/ 7/	--	--	--	1,600	16,200	--	--	--	--	--	--
Maine	800	1,100	700	2,800	16,800	400	29.9	800	9.2	83	5
Maryland 7/	5,600	6,500	5,600	21,000	126,000	3,300	0.6	5,600	1.1	115	9
Massachusetts	3,700	4,200	3,900	13,100	91,700	1,200	-2.0	3,800	3.3	61	5
Michigan 7/	13,300	12,800	12,700	42,000	158,000	3,000	-7.7	12,300	-7.0	76	9
Minnesota	4,700	6,300	3,700	15,400	88,500	800	23.0	4,300	-7.6	52	5
Mississippi 6/ 7/	--	--	--	4,900	29,400	--	--	--	--	--	--
Missouri	18,800	20,700	19,700	74,300	409,000	15,100	0.0	20,100	6.9	45	16
Montana 6/	--	--	--	2,700	12,100	--	--	--	--	--	--
Nebraska	2,100	2,000	1,600	7,000	46,900	1,300	-0.3	1,800	-15.7	93	6
Nevada	1,700	1,500	1,200	5,600	46,200	1,000	-17.8	1,600	-4.8	23	4
New Hampshire 7/	600	700	700	2,200	14,100	200	-10.1	600	-4.4	118	4
New Jersey	6,400	7,600	7,000	24,800	174,000	3,700	-1.1	7,200	12.6	53	7
New Mexico 7/	1,800	1,400	600	4,700	28,200	700	-23.9	1,200	-32.9	35	3
New York	13,100	17,100	11,800	46,000	322,000	2,900	-26.2	10,900	-16.7	56	10
North Carolina	17,400	18,900	16,900	65,000	507,000	13,400	14.2	18,000	3.0	99	12
North Dakota 5/	--	--	--	--	--	--	--	--	--	--	--
Ohio	23,000	25,300	19,900	80,900	485,000	10,700	-15.6	22,900	-0.4	63	12
Oklahoma 7/	8,200	8,700	9,100	32,500	117,000	7,900	21.2	8,000	-2.0	90	11
Oregon	5,300	6,200	4,500	19,700	98,500	3,200	-11.2	5,400	2.5	37	11
Pennsylvania	24,000	29,200	24,000	90,900	564,000	13,100	-4.1	26,900	12.0	63	20
Rhode Island 5/	--	--	--	1,800	10,800	--	--	--	--	--	--
South Carolina	7,100	7,500	7,100	27,400	216,000	6,600	16.2	8,500	19.2	98	8
South Dakota	1,800	2,100	1,400	6,000	30,600	700	-1.0	1,800	-2.6	80	5
Tennessee	16,900	19,600	16,900	64,000	384,000	10,200	-4.2	18,100	7.2	74	8
Texas	25,000	26,100	21,500	93,000	465,000	28,500	39.9	28,500	13.9	59	12
Utah	3,400	3,700	2,500	11,800	54,300	2,500	11.9	2,900	-15.1	42	6
Vermont 6/	--	--	--	8,400	50,400	--	--	--	--	--	--
Virginia	19,300	22,400	20,400	73,600	442,000	13,100	14.2	20,400	5.7	64	11
Washington	3,900	3,700	3,700	14,400	86,400	6,000	96.9	5,100	29.9	32	5
West Virginia	3,700	4,200	3,200	13,000	78,000	2,000	5.9	4,200	14.7	54	7
Wisconsin	7,400	9,500	8,000	27,600	110,000	3,000	10.8	8,600	16.6	45	8
Wyoming	1,600	1,700	1,600	5,900	35,400	1,600	67.1	1,600	-0.9	84	4
Other	--	--	--	11,000	60,000	--	--	--	--	--	--
Total	XX	XX	XX	1,500,000	8,800,000	XX	XX	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Owing to a low number of reporting companies, no production estimates by quarters were generated.

7/ To avoid disclosing proprietary data, certain State totals do not include all kinds of stone produced within the State; the portion not shown has been included with "Other."

TABLE 3
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY REGION 1/
(Thousand metric tons and thousand dollars)

Region/Division	1998					1999					
	Quantity				Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Quantity 2nd qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	2nd qtr.	3rd qtr.	4th qtr.	Total 2/							
Northeast:											
New England	11,400	14,500	11,400	43,000	215,000	5,200	-7.1	11,800	3.8	24	22
Middle Atlantic	20,300	23,700	15,400	68,600	373,000	8,400	-9.4	19,300	-4.6	25	23
Midwest:											
East North Central	56,700	66,600	53,600	200,000	828,000	25,100	9.5	59,100	4.2	44	49
West North Central	29,900	35,900	23,600	97,600	351,000	10,000	19.8	30,700	2.7	24	33
South:											
South Atlantic	19,600	19,200	18,000	72,400	354,000	17,600	12.9	20,500	4.6	56	38
East South Central	14,000	12,700	11,500	47,100	208,000	9,100	3.0	13,300	-5.1	37	20
West South Central	28,300	26,800	23,800	100,000	471,000	23,000	7.2	24,600	-13.2	37	14
West:											
Mountain	55,300	52,200	43,800	189,000	797,000	43,400	14.2	51,400	-7.1	44	35
Pacific 5/	45,400	59,100	52,800	188,000	1,050,000	36,800	19.7	51,000	12.4	50	27
Total 2/	281,000	311,000	254,000	6/1,020,000	6/4,710,000	179,000	11.1	282,000	0.3	XX	XX

XX Not applicable.

1/Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by regions.

3/All percentage changes are calculated using unrounded totals.

4/Number of companies reporting for the quarterly survey.

5/Does not include Alaska and Hawaii.

6/Includes Alaska and Hawaii.

TABLE 4
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/
(Thousand metric tons and thousand dollars)

State	1998					1999					
	Quantity				Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Quantity 2nd qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	2nd qtr.	3rd qtr.	4th qtr.	Total 2/							
Alabama	3,900	3,800	3,600	14,500	65,600	3,500	11.2	4,100	4.6	42	8
Alaska 5/	--	--	--	12,500	57,400	--	--	--	--	--	--
Arizona	12,900	11,900	12,000	46,900	229,000	13,700	35.9	14,300	10.7	70	8
Arkansas	3,200	3,200	2,600	11,300	52,800	2,400	7.5	2,700	-16.0	62	4
California	28,600	39,100	38,000	125,000	752,000	25,500	32.6	34,500	20.8	57	15
Colorado	10,600	11,500	9,300	37,700	172,000	7,800	24.5	10,200	-3.2	44	6
Connecticut	1,800	2,000	1,700	6,710	31,600	800	-26.6	1,800	-0.1	28	5
Delaware 6/	--	--	--	2,240	11,200	--	--	--	--	--	--
Florida	5,300	5,000	5,100	20,100	81,200	5,400	16.2	5,800	8.7	76	9
Georgia	1,800	2,200	1,800	7,000	27,800	2,200	75.8	2,600	44.6	31	6
Hawaii 5/	--	--	--	378	4,210	--	--	--	--	--	--
Idaho	4,800	4,400	3,000	15,500	46,000	1,700	-49.6	3,300	-30.8	27	5
Illinois	9,900	10,900	9,100	33,800	149,000	4,000	4.6	10,600	6.5	50	10
Indiana	6,800	6,600	5,700	23,600	103,000	5,500	20.7	8,500	25.3	54	8
Iowa	3,700	4,800	3,500	13,000	54,700	1,000	3.7	3,500	-5.6	28	6
Kansas	2,900	3,000	1,900	9,750	28,300	1,400	-32.5	1,700	-40.4	24	3
Kentucky	2,000	2,500	1,900	7,870	26,500	1,400	-3.3	2,500	24.4	21	3
Louisiana	3,800	3,200	3,000	12,600	58,300	2,800	5.7	3,200	-14.1	58	4
Maine	1,700	3,000	2,100	7,100	33,100	500	66.9	2,200	28.0	22	4
Maryland	2,900	3,400	2,700	11,700	78,200	2,200	-18.7	2,700	-9.2	43	6
Massachusetts	3,900	3,900	4,000	14,000	76,600	2,200	0.1	4,100	5.4	18	6
Michigan	18,100	22,400	15,500	61,700	229,000	5,800	1.2	17,000	-5.7	41	10
Minnesota	11,200	12,800	7,800	32,900	124,000	1,500	38.7	11,700	4.7	27	10
Mississippi	4,600	4,400	4,100	15,600	73,300	2,600	0.9	4,000	-11.7	40	6
Missouri	2,000	2,900	2,300	8,360	32,100	1,800	65.7	2,900	43.6	51	5
Montana 6/	--	--	--	8,760	33,100	--	--	--	--	--	--
Nebraska	5,200	4,900	3,100	14,400	50,600	1,600	31.5	4,700	-9.8	21	6
Nevada	7,000	7,200	5,600	25,200	121,000	5,700	5.4	5,700	-19.1	31	5
New Hampshire	2,300	3,300	1,900	8,780	39,000	1,200	-7.7	2,100	-11.4	34	5
New Jersey	4,600	4,900	4,300	18,100	99,200	3,500	-19.5	5,000	8.1	25	4
New Mexico	3,300	3,000	2,000	10,700	55,000	2,000	-14.5	2,500	-25.8	41	3
New York	10,400	12,500	6,100	32,100	167,000	3,400	7.5	8,600	-17.2	21	11
North Carolina	2,900	2,700	2,600	10,400	59,500	2,000	-15.9	2,700	-6.2	41	5
North Dakota 5/	--	--	--	9,360	27,600	--	--	--	--	--	--
Ohio	13,000	17,500	14,000	50,100	244,000	6,100	7.8	13,500	4.5	45	15
Oklahoma	2,500	2,500	2,100	8,930	32,300	2,300	25.3	2,300	-7.3	44	6
Oregon	4,400	6,000	3,500	16,600	89,700	2,800	1.1	4,500	3.8	28	4
Pennsylvania	5,400	6,500	4,600	18,400	107,000	1,700	-9.7	5,500	2.0	34	10
Rhode Island 6/	--	--	--	2,070	17,000	--	--	--	--	--	--
South Carolina	2,400	2,300	2,300	8,770	33,800	2,200	26.9	2,300	-3.2	57	5
South Dakota	2,500	4,200	2,100	9,840	34,100	900	-8.2	2,800	13.2	16	5
Tennessee	3,400	2,200	2,000	9,070	42,600	1,400	-8.6	2,700	-18.6	37	6
Texas	18,600	17,700	16,200	67,500	328,000	15,600	4.2	16,200	-12.9	29	8
Utah	13,700	11,600	7,700	40,700	125,000	6,900	-10.9	10,400	-24.1	41	4
Vermont	1,100	1,400	1,500	4,300	18,000	300	4.6	1,400	27.4	22	4
Virginia	3,100	2,800	2,500	10,600	54,000	2,700	21.0	3,200	3.0	66	8
Washington	13,500	14,300	9,300	46,500	213,000	7,800	-17.8	11,600	-14.1	36	9
West Virginia	500	500	400	1,600	7,860	200	30.1	600	22.9	101	4
Wisconsin	9,100	9,500	9,600	30,600	103,000	2,800	16.0	9,000	-1.2	35	11
Wyoming	900	800	1,100	3,850	15,800	900	-10.8	700	-26.7	18	3
Total	XX	XX	XX	1,020,000	4,710,000	XX	XX	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Owing to a low number of reporting companies, no production estimates by quarters were generated.